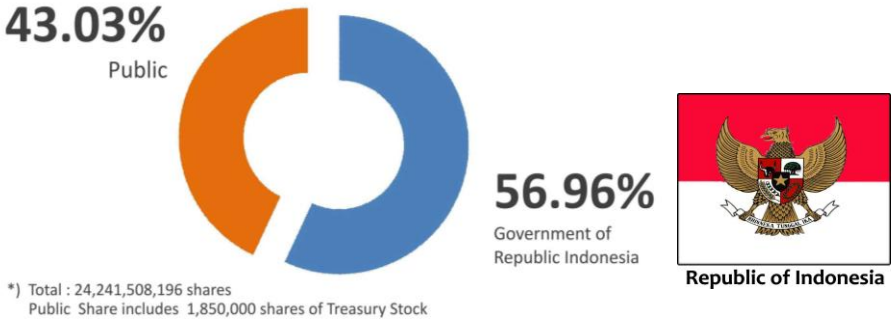
Indonesia's Gas Transportation and Distribution Infrastructure
The Perspective of PGN

Grand Melia Jakarta

Jakarta, 6 May 2013

Introduction

- PT Perusahaan Gas Negara (Persero) Tbk (PGN) is an Indonesian SOE in natural gas transmission and distribution business. Established in 1965.

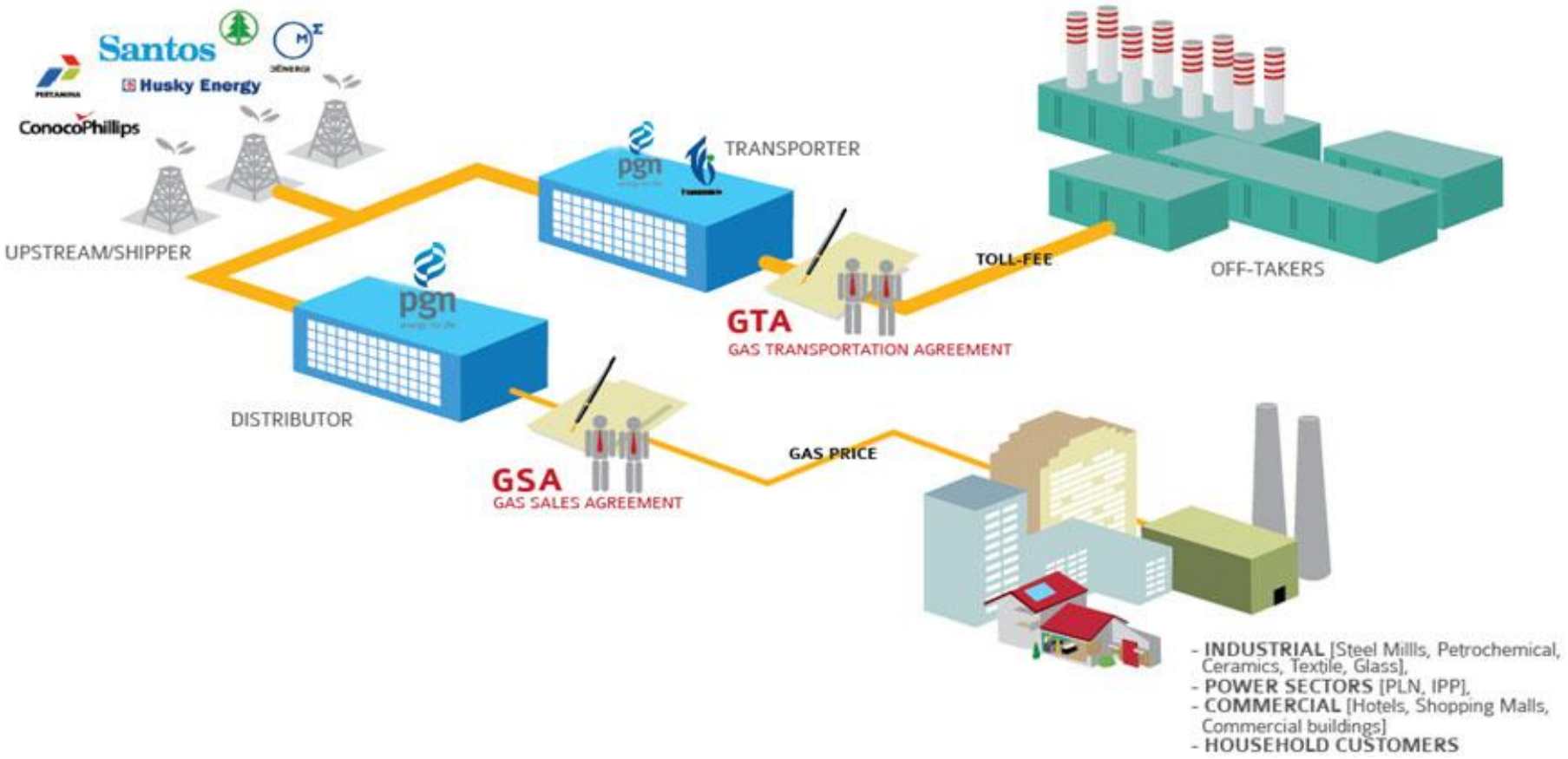


- PGN operates and owns more than 5900 Km pipelines, for gas transmission and distribution.
- Distribution areas are including northern part of Sumatera, Batam, South Sumatera, West and East Java island.

PGN is one of the key players in providing natural gas for **Indonesia Gas Market**

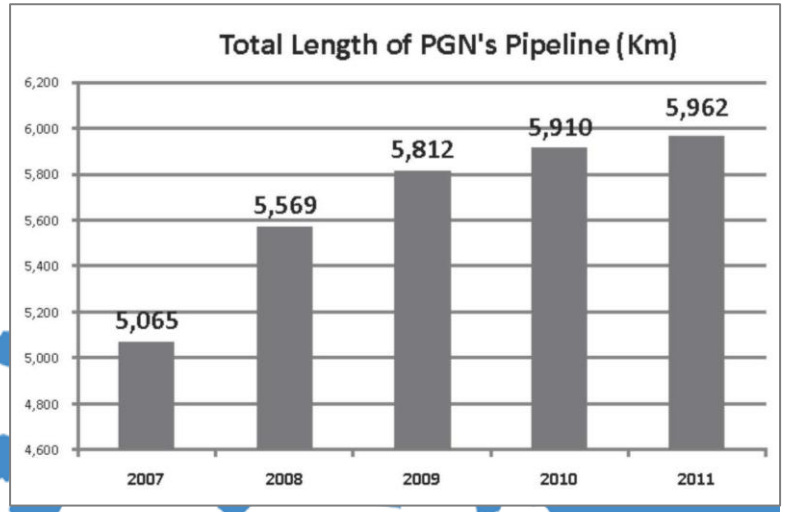
Introduction

PGN as Transporter and Distributor of Natural Gas



Introduction

PGN Infrastructures & Customers



Panaran Station

Pagardewa Compressor St.

Grissik Receiving Station

Labuhan Maringgai St.

Pagardewa Station

Terbanggi Besar St.

Bojonegara Station

Muara Bekasi Station

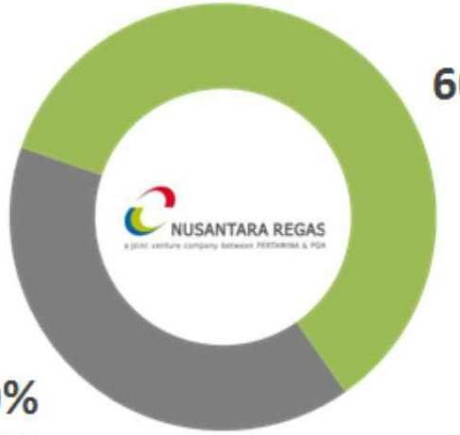
Legend:

- Strategic Business Unit (SBU) I
- Strategic Business Unit (SBU) II
- Strategic Business Unit (SBU) III
- South Sumatera – West Java Transmission Pipeline (SSWJ) (970 MMSCFD)
- Grissik – Duri transmission pipeline (427 MMSCFD)
- Grissik – Singapore transmission pipeline (465 MMSCFD)

PGN Subsidiaries & Affiliates

40%
Transasia
Pipeline Company

- *Petronas International Corporation Ltd. (35%)*
- *Conoco Indonesia Holding Ltd. (35%)*
- *SPC Indo-Pipeline Co. Ltd. (15%)*
- *Talisman Transgasindo Ltd. (15%)*

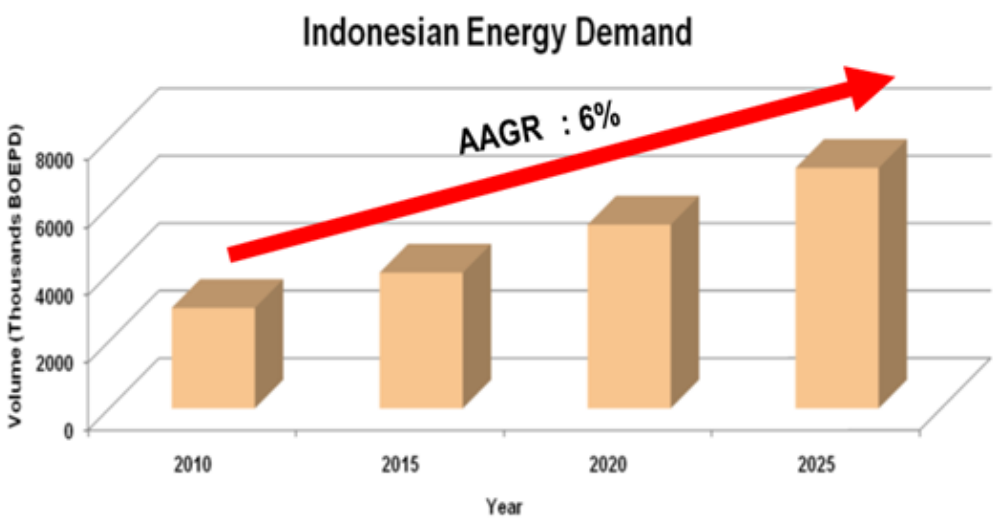


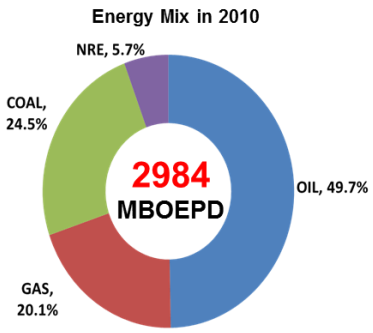
60%

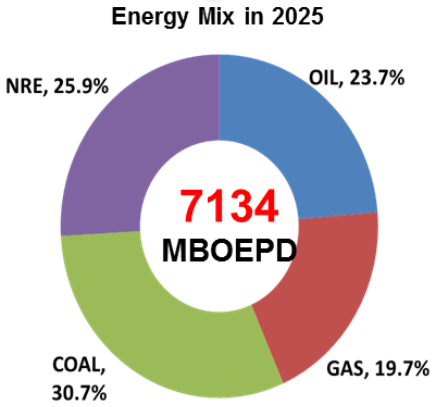
40%
PGN

Indonesian Gas Market

Rapid Indonesia Energy Demand Growth







(Ref: SKK Migas, 2013)

The rapid growth of natural gas demand due to:

No Subsidy of Fuel for the Industries
Subsidies for industries revoked in 2005

Pricing and Efficiencies
Significant price and efficiencies benefit by converting to natural gas, as well as environmental concerns

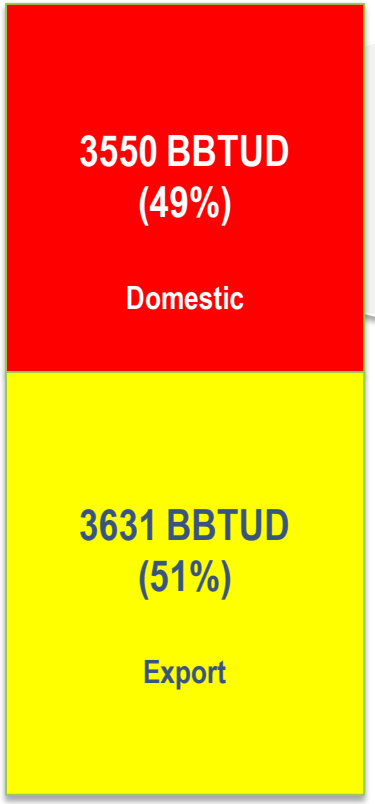
Conversion of Power Plants
Pent-up demand from the conversion of existing dual fired power plants pending availability of gas

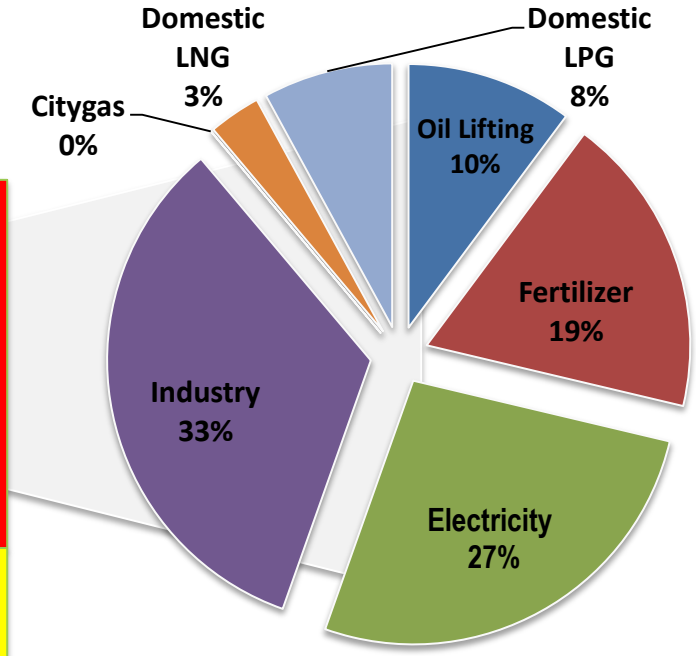
Demand from the industries
Require natural gas to compete in the era of Free Trade Agreement

Indonesian Gas Market

Indonesia Natural Gas Allocation - 2012

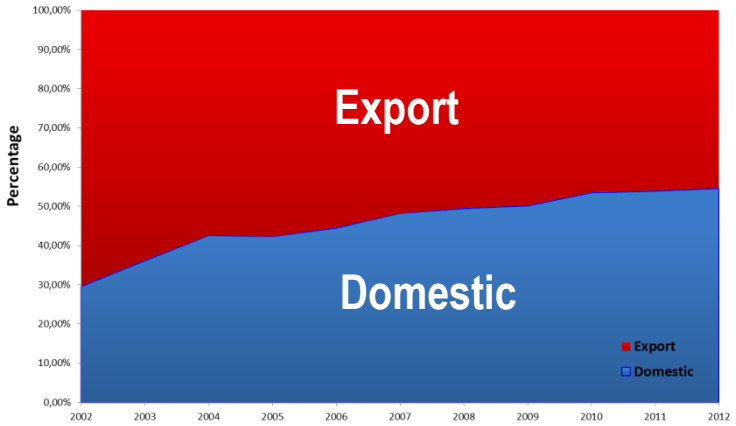
Total : 7181 BBTUD





(Ref. SKK Migas, 2013)

Indonesia Gas Contract 2002 - 2012



- Tendency to increase domestic utilization
- Shifting Paradigm in managing Indonesia natural Gas

Indonesian Gas Market

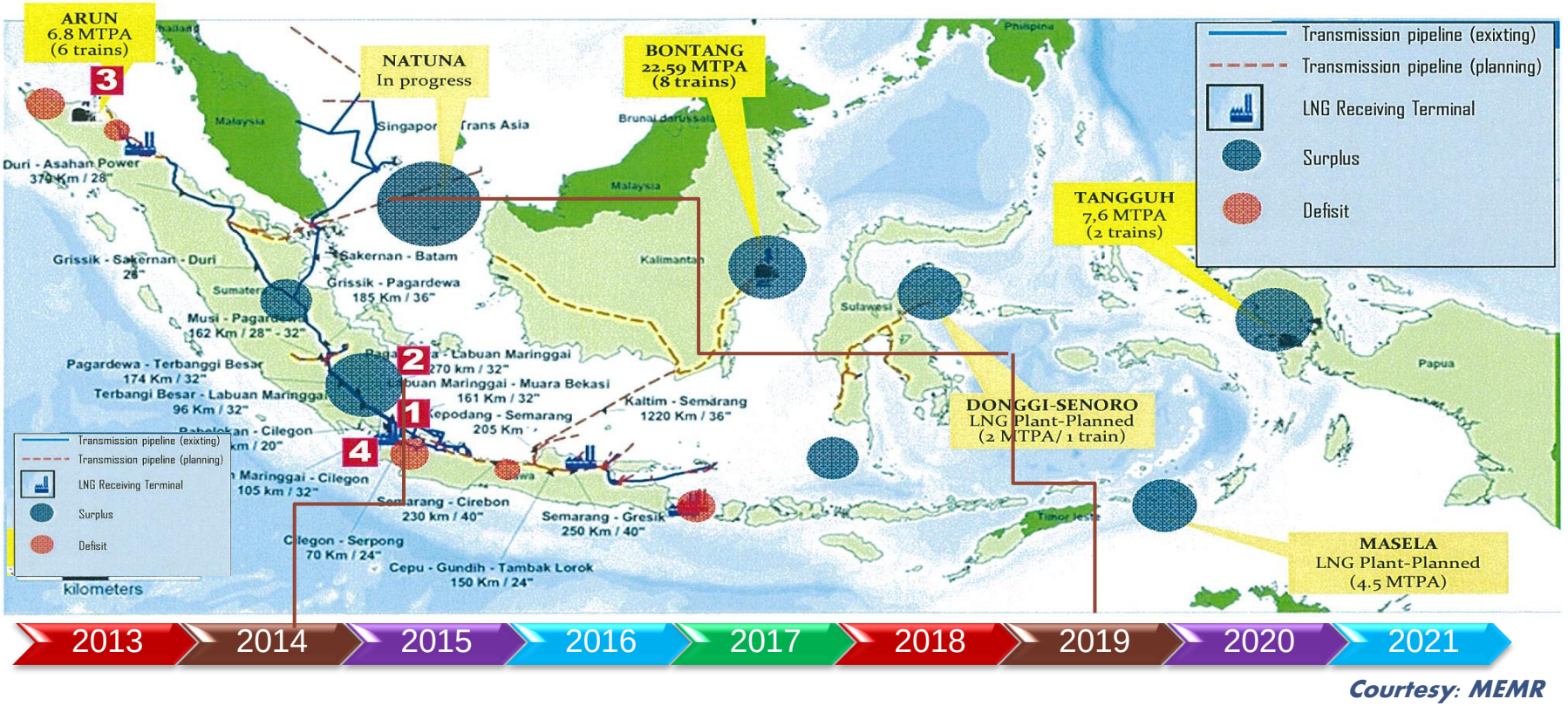
Infrastructure Development Challenges

Infrastructure Gap to Increase Domestic Utilization

Source : Ministry of Energy & Mineral Resources Decree No. 2700.K/11/MEM/2012

Indonesian Gas Market

Infrastructure Development Challenges

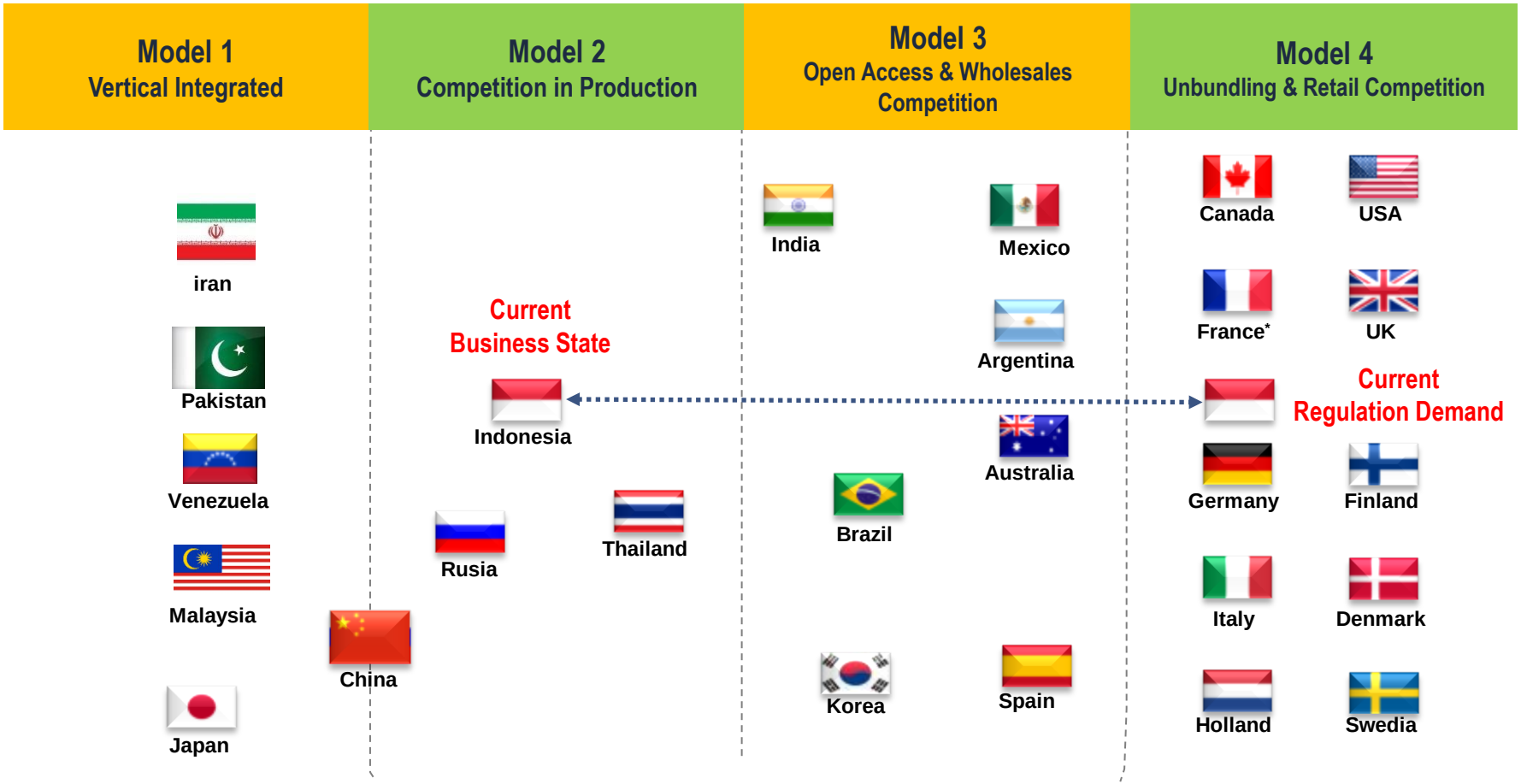


Courtesy: MEMR

- Geographical challenges
- Time synchronization challenges
- Pricing Gap between domestic and export challenges

Indonesian Gas Market

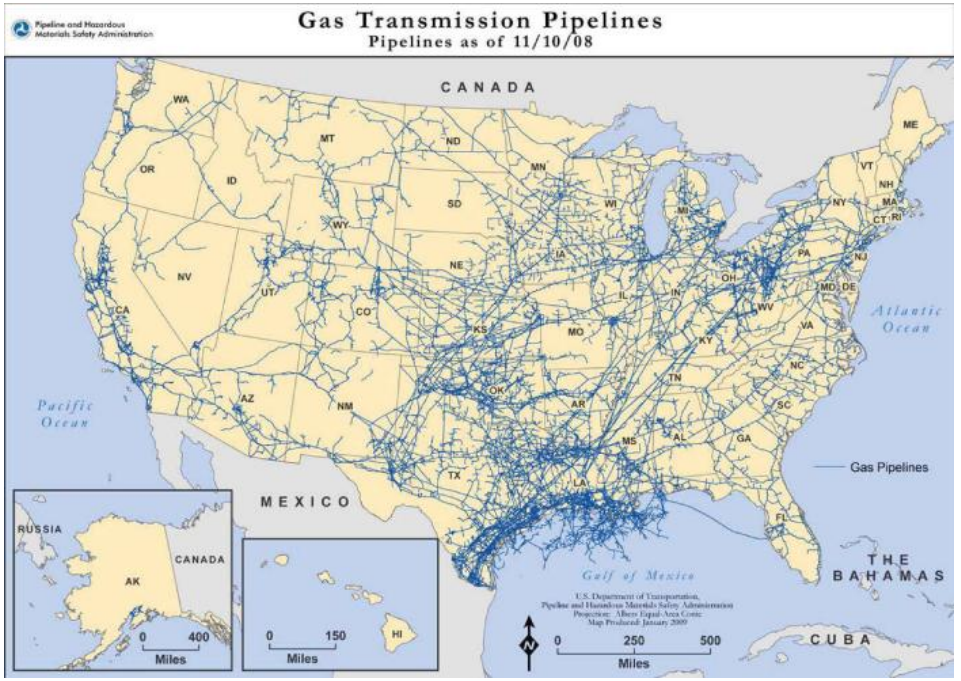
Indonesia Natural Gas Business Structure

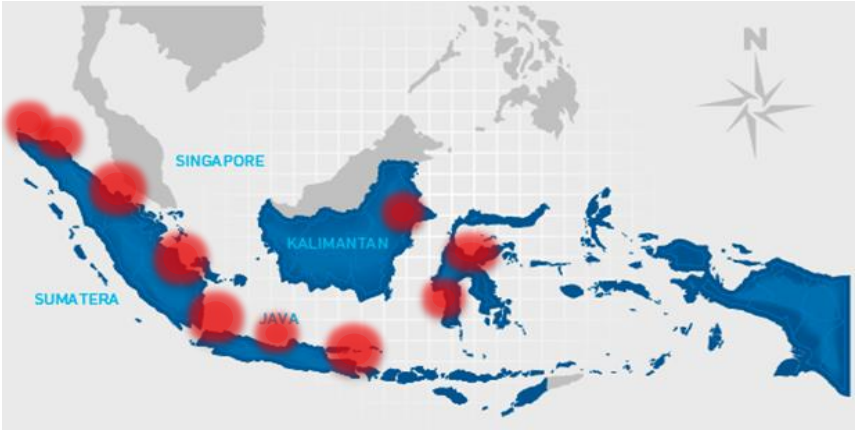


Ref: The emergence in the natural gas industries (Juris, 1998)
AT Kearney (2009)

Lesson Learnt From US Gas Business

- US has an integrated gas infrastructure
- Infrastructure has integrated markets and form single national market
- Pricing through common references (Henry Hub)
- Onshore / On land geographical challenges

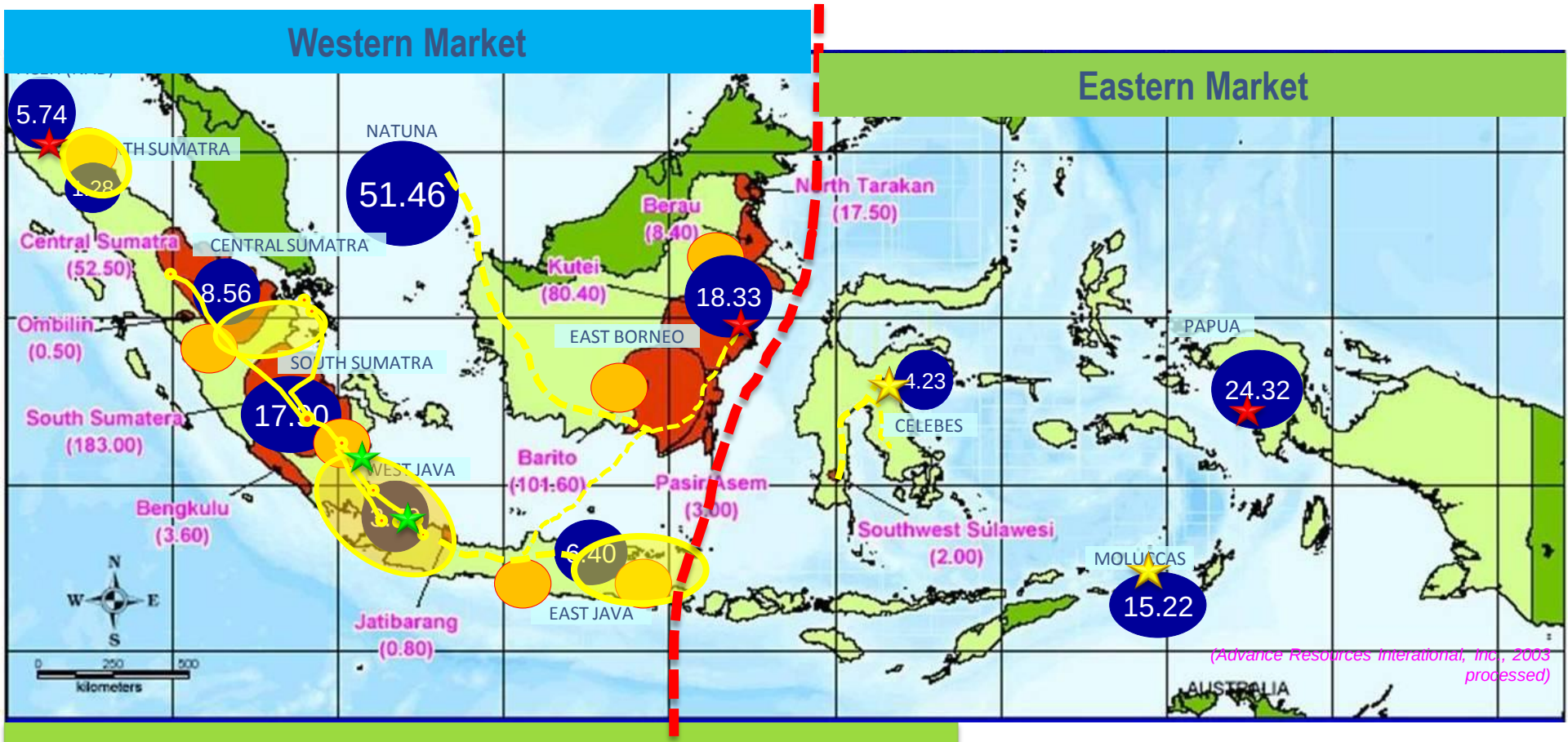




- Indonesia has a discrete gas market
- No single national market
- Infrastructure was developed based on ‘B to B’ scheme
- Onshore and large Offshore geographical challenges

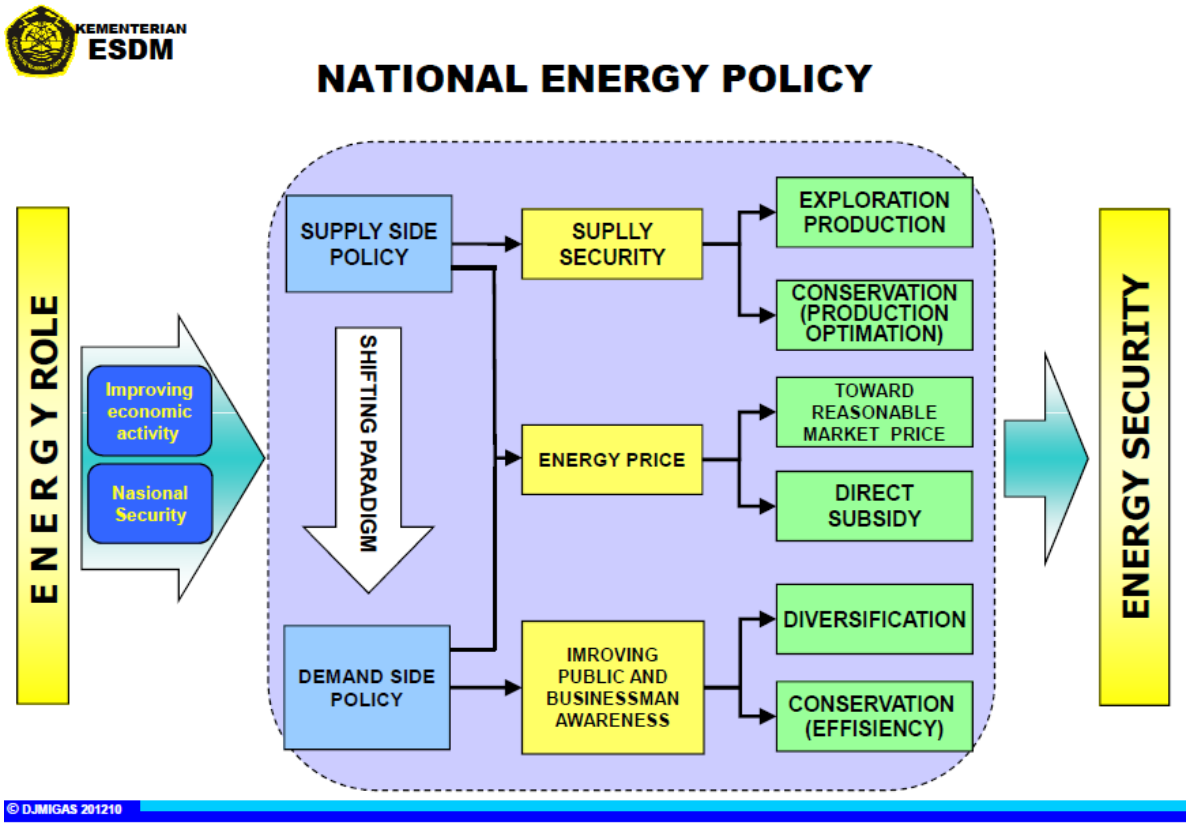
Lesson Learnt From US Gas Business

Creating Single Indonesia Gas Market
(Virtual of Physical Integration)



- Eastern part: LNG Vessel Transportation Mode Integration
- Western part: Pipeline system Integration

Indonesia Energy Security



US Energy Security definition is No Import and Self sustaining country

Indonesia

- Fulfillment of domestic demand
- Control the export

Conclusion

a. PGN has been proven in Indonesia as a gas company successfully developing and integrating gas infrastructure and gas market in many parts in the western Indonesia.
b. Indonesia is in the state of rapid development and thus requiring natural gas as its major role.
c. The challenge is providing the adequate infrastructure to increase the domestic gas utilization;
    - Gap in Infrastructure availability;
    - Complicated gas business transformation.
d. The challenges in infrastructure development:
    - Geographical challenges
    - Synchronization between Production Planning and Market Readiness

Thank you